

Gross Industrial Output

In the Chinese Mainland, gross industrial output is defined as the total volume of industrial products sold or available for sale in value terms which reflects the total achievements and overall scale of industrial production during a given period. It includes the value of the finished products, which are not to be further processed in the enterprises and have been inspected, packed, and put in storage; the value of industrial services rendered to other units; and the changes in the value of the semi-finished products and products in process between the beginning and closing of the period. The gross industrial output value is calculated with 'factory method'. No double calculations are to be made within the same enterprise. However, double counting does occur among different enterprises.¹⁸

According to the Guangdong Statistical Yearbook 2005, the gross industrial output (GIO) of the Pearl River Delta Economic Zone for state-owned enterprises and enterprises with annual sales revenue in excess of 5 million yuan (just over US\$600,000) was 2,315.30 billion yuan (US\$279.63 billion) in 2004. Adding the contribution of Hong Kong and Macao brings these figures up to US\$299.83 billion and US\$301.93 billion, respectively. Gross industrial output in the Yangtze River Delta region was 4,954.7 billion yuan (US\$598.39 billion) in 2004.¹⁹ Based on these figures, the Pearl River Delta region accounted for 12.37 percent of the gross industrial output of the Chinese Mainland. The Yangtze River Delta region accounted for 26.46 percent of the gross industrial output of the Chinese Mainland.

¹⁸ *Guangdong Statistical Yearbook 2005*, p. 368 and *China Statistical Yearbook 2005*, p. 525.

¹⁹ *Statistical Yearbooks of Shanghai, Jiangsu Province, Zhejiang Province, and local jurisdictions in Jiangsu and Zhejiang Provinces.*

One issue that arises in the context of measuring gross industrial output (GIO) is that very small firms are not included in the statistics. This could result in a significant understatement for the Pearl River Delta Economic Zone because of the presence of numerous small firms in the region. It also would result in an understatement for the Yangtze River Delta region.

Another issue is the treatment of export processing production. In export processing, inputs and capital goods can be imported duty-free and then used to produce finished goods for export. In China, export processing is covered by a particular set of rules and regulations and an 'export processing facility' is a particular category of enterprise. The issue with respect to calculation of gross industrial output is that usually only the value of the processing contract for export processing activities is included as part of GIO. This substantially underestimates the value of the finished goods produced by this method. The nature of the problem can be seen by comparing the exports and gross industrial output in Shenzhen and Dongguan. These two jurisdictions produce primarily for export, have exports consisting overwhelmingly of manufactured goods, and are the leading centres for export processing in the Pearl River Delta Economic Zone. In 2005, Shenzhen's ratio of exports to gross industrial output was 86.90 percent and Dongguan's was 85.03 percent, compared to a Pearl River Delta Economic Zone's average of 59.67 percent. If the 'real' gross industrial output in the two jurisdictions is adjusted to obtain the 59.67 percent ratio, the Pearl River Delta Economic Zone's gross industrial output would be 3,723.40 billion yuan (US\$454.63 billion) rather than 3,119.26 billion yuan (US\$380.86 billion). We have not changed the figures in the tables because it is impossible to estimate the understatement precisely, but anyone using the statistics should be aware of the issue.

Comments

The form of organisation and production can have an important influence on the numbers that appear in China's statistics. In particular, the exclusion of small firms from calculations of gross industrial output will tend to have a disproportionate impact on statistics for industries and locations that have a large number of small firms. Different jurisdictions also include or exclude different types of firms for different reasons. Export processing is treated differently from other forms of manufacturing. In this report, we have highlighted the potential impact on gross industrial output figures. There is some evidence that capital goods associated with export processing also may not appear as part of foreign investment, though we have been unable to trace this particular aspect.

